

Claims

What is claimed is:

1. A disposable absorbent article comprising:

- (i) a stretchable multilayer chassis that defines an inner surface and an outer surface;
- (ii) an absorbent body having an inner surface and an outer surface

wherein:

- (a) the stretchable multilayer chassis is stretchable in at least the cross-machine direction;
- (b) the absorbent body is affixed to the inner surface of the multilayer stretchable chassis

such that in use, the inner surface of the absorbent body lies against the wearer and the stretchable multilayer chassis stretches about the wearer independently in at least the cross-machine direction.

2. The disposable absorbent article of claim 1, which is a diaper.

3. The disposable absorbent article of claim 1, wherein the absorbent body is attached to the stretchable multilayer chassis in a cross-machine direction attachment pattern, in a machine direction attachment pattern, or both in a cross-machine direction attachment pattern and in a machine direction attachment pattern.

4. The disposable absorbent article of claim 3, wherein less than about 95% of the surface area of the absorbent body is attached to the surface area of the stretchable multilayer chassis.

5. The disposable absorbent article of claim 3, wherein less than about 50% of the surface area of the absorbent body is attached to the surface area of the stretchable multilayer chassis.

6. The disposable absorbent article of claim 3, wherein less than about 25% of the surface area of the absorbent body is attached to the surface area of the stretchable multilayer chassis.

7. The disposable absorbent article of claim 1, wherein the stretchable multilayer chassis comprises at least two layers.

8. The disposable absorbent article of claim 7, wherein the stretchable multilayer chassis comprises a chassis liner and an outer cover.

9. The disposable absorbent article of claim 8, wherein the chassis liner and the outer cover are both independently extensible.

10. The disposable absorbent article of claim 8, wherein the chassis liner and the outer cover are both independently elastic.

11. The disposable absorbent article of claim 8, wherein the chassis liner is independently extensible and the outer cover is independently elastic.

12. The disposable absorbent article of claim 8, wherein the chassis liner is independently elastic and the outer cover is independently extensible.

13. The disposable absorbent article of claim 8, wherein the chassis liner comprises a neck-stretched, spunbond web.

14. The disposable absorbent article of claim 8, wherein the outer cover comprises elastic material that is stretchable independently in both the cross-machine direction and the machine

direction by at least 25% to at least 125%.

15. The disposable absorbent article of claim 8, wherein the outer cover comprises elastic material that is stretchable independently in both the cross-machine direction and the machine direction by at least 100% to at least 200%.

16. The disposable absorbent article of claim 8, wherein the outer cover comprises elastic material that is stretchable independently in both the cross-machine direction and the machine direction by at least 150% to at least 250%.

17. The disposable absorbent article of claim 8, wherein the outer cover comprises polypropylene spunbond material that is laminated with styrene-isoprene-styrene-based adhesive.

18. The disposable absorbent article of claim 8, wherein the outer cover comprises microporous polymer films, nonwoven fabrics, a spunbonded laminate, a meltblown laminate, a spunbond-meltblown-spunbond laminate, a stretch-bonded laminate, or a combination thereof.

19. The disposable absorbent article of claim 8, wherein the outer cover comprises a thermoplastic nonwoven web made from stretchable polymers.

20. The disposable absorbent article of claim 19, wherein the stretchable polymers comprise polyolefins, polyethylene, heterophasic polymers, olefin polymers, multi-block elastomeric copolymers, or a combination thereof.

21. The disposable absorbent article of claim 1, wherein the absorbent body comprises at least an absorbent core.

22. The disposable absorbent article of claim 1, wherein the non-stretch absorbent body comprises an absorbent core, a tissue wrapsheet, an absorbent body liner, or a combination

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thereof.

23. The disposable absorbent article of claim 22, wherein the absorbent core comprises a matrix of hydrophilic fibers and superabsorbent material.

24. A disposable absorbent article comprising:

- i) an absorbent body liner that defines an inner surface and an outer surface;
- ii) an absorbent core that defines an inner surface and an outer surface;
- iii) a tissue wrapsheet;
- iv) a surge management layer that defines an inner surface and an outer surface;
- v) a chassis liner that defines an inner surface and an outer surface wherein the chassis liner is stretchable independently in both the cross-machine direction and the machine direction; and
- vi) an outer cover that defines an inner surface and an outer surface wherein the outer cover is stretchable independently in both the cross-machine direction and the machine direction

wherein:

- (a) the absorbent body liner houses the absorbent core, the tissue wrapsheet and the surge management layer forms an absorbent body; and
- (b) the outer surface of the chassis liner is laminated to the inner surface of the outer cover forming a stretchable multilayer chassis defining an inner surface and an outer surface

such that the inner surface of the absorbent core and the outer surface of the absorbent core are wrapped by a tissue wrapsheet; the inner surface of the surge management layer is adjacent to the outer surface of the absorbent body liner and the outer surface of the surge management layer is

adjacent to the tissue wrapsheet which is adjacent to the inner surface of the absorbent core; and wherein the outer surface of the absorbent body liner is affixed to the inner surface of the stretchable multilayer chassis.

25. The disposable absorbent article of claim 24 which is a diaper.

26. The disposable absorbent article of claim 24, wherein the absorbent body is attached to the stretchable multilayer chassis in a cross-machine direction attachment pattern, in a machine direction attachment pattern, or both in a cross-machine direction attachment pattern and in a machine direction attachment pattern.

27. The disposable absorbent article of claim 26, wherein less than about 95% of the surface area of the absorbent body is attached to the surface area of the stretchable multilayer chassis.

28. The disposable absorbent article of claim 26, wherein less than about 50% of the surface area of the absorbent body is attached to the surface area of the stretchable multilayer chassis.

29. The disposable absorbent article of claim 26, wherein less than about 25% of the surface area of the absorbent body is attached to the surface area of the stretchable multilayer chassis.

30. The disposable absorbent article of claim 24, wherein the chassis liner and the outer cover are both independently extensible.

31. The disposable absorbent article of claim 24, wherein the chassis liner and the outer cover are both independently elastic.

32. The disposable absorbent article of claim 24, wherein the chassis liner is independently extensible and the outer cover is independently elastic.

33. The disposable absorbent article of claim 24, wherein the chassis liner is independently elastic and the outer cover is independently extensible.

34. The disposable absorbent article of claim 24, wherein the chassis liner comprises a neck-stretched, spunbond web.

35. The disposable absorbent article of claim 24, wherein the outer cover comprises elastic material that is stretchable independently in both the cross-machine direction and the machine direction by at least 25% to at least 150% of an initial unstretched configuration.

36. The disposable absorbent article of claim 24, wherein the outer cover comprises elastic material that is stretchable independently in both the cross-machine direction and the machine direction by at least 100% to at least 200% of an initial unstretched configuration.

37. The disposable absorbent article of claim 24, wherein the outer cover comprises elastic material that is stretchable independently in both the cross-machine direction and the machine direction by at least 150% to at least 250% of an initial unstretched configuration.

38. The disposable absorbent article of claim 24, wherein the outer cover comprises a polypropylene spunbond that is laminated with styrene-isoprene-styrene-based adhesive.

39. The disposable absorbent article of claim 24, wherein the outer cover comprises microporous polymer films, nonwoven fabrics, a spunbonded laminate, a meltblown laminate, a spunbond-meltblown-spunbond laminate, a stretch-bonded laminate, or a combination thereof.

40. The disposable absorbent article of claim 24, wherein the outer cover comprises a thermoplastic nonwoven web made from stretchable polymers.

41. The disposable absorbent article of claim 40, wherein the stretchable polymers comprise

polyolefins, polyethylene, heterophasic polymers, olefin polymers, multi-block elastomeric copolymers, or a combination thereof.

42. The disposable absorbent article of claim 24, wherein the absorbent body comprises non-stretch material, low stretch material, or a combination thereof.

43. The disposable absorbent article of claim 24, wherein the absorbent core comprises a matrix of hydrophilic fibers and superabsorbent fibers.

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